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EXAMINER

PONIKIEWSKI, TOMASZ

ART UNIT PAPER NUMBER

2165

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,107	Applicant(s) HU ET AL.	
	Examiner Tomasz Ponikiewski	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) 36-63 and 65-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35, 64 and 72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-72 are pending. Claims 36-63 and 65-71 are withdrawn from consideration.

Election/Restrictions

2. Claims 36-63 and 65-71 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected groups II through VI, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11 November 2006.

Applicant's election with traverse of group I in the reply filed on 11 November 2006 is acknowledged. The traversal is on the ground(s) that the groups are similar enough not to put undue burden on the examiner. This is not found persuasive because some classification classes are broad enough where matter classified in one subclass may not be similar to another matter classified in different subclass..

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

3. Claim 13 is objected to because of the following informalities: the recitation of "if" makes the statement(s) following the recitation totally optional. As such the action does not have to occur. The examiner suggests using "when" instead. Appropriate correction is required.

Claims 2-35 are objected to because of the following informalities: Each of these dependent claims starts with "Apparatus". As such it indicates a new instance of each. The dependent claims should be denoted with "The" at the start of the claim, ex. "The apparatus of claim 1". Appropriate correction is required.

Claims 1, 19, and 72 recite the word "for identifying" and "for use" in the body of the claims. It indicates intended use and as such does not carry patentable weight. The word could be changed to recite "to". The limitations following the phrase "for" describes only intended use but not necessarily required functionality of the claim. Limitations following the phrase "for" do not carry patentable weight, which cause the claims to appear as a series of non-functional descriptive material/data without any functional relation with each other. Applicant is required to amend the claims so that the claim limitations are recited in a definite form. For example, claim 1 recites "for identifying" should be "to identify".

Claims 1, 7, 8, 10-12, 16-21, 23, 28 and 30-33 recite, "operable to" in the body of the claims. Operating does not mean that the step is being accomplished. It suggests a capability but not necessarily taking place. It should be deleted or amended to recite definite language i.e. "configured to".

Claim 2-6, 9-18, 22, 24-27, 29, 31 and 34-35 recite, "is arranged" in the body of the claims. Arranging does not mean that the step is being accomplished. It suggests a capability but not necessarily taking place. It should be deleted or amended to recite definite language i.e. "configured to".

Claim 21 is objected to because of the following informalities: in the body of the claim the word "score" is misspelled. Appropriate correction is required.

Claims 34-35 are objected to because of the following informalities: in the body of the claim the word "hyponyms" is misspelled. Appropriate correction is required.

Claims 12, 15 and 25 are objected to because of the following informalities: claims recite "as so to" and "so that". The recitations should be changed to "wherein" or "which".

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 64 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 64 does not list any hardware (i.e. computer) in the body of the claim tied to the steps in order to operate the steps of the claims therefore resulting in software only implementation.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-4, 9, 12, 14-15, 29-33, 64 and 72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 30-31, 33, 64 and 72 recite the limitation "the content" in body of the claims. There is insufficient antecedent basis for this limitation in the claims.

Claims 1, 2 and 72 recite the limitation "the highest ranking words" the body of the claims. There is insufficient antecedent basis for this limitation in the claims.

Claims 1, 3 and 72 recite the limitation "the highest ranking co-occurrences" in body of the claims. There is insufficient antecedent basis for this limitation in the claims.

Claims 1 and 72 recite the limitation "the highest ranking" in the body of the claims. There is insufficient antecedent basis for this limitation in the claims.

Claim 4 recites the limitation "the highest ranking phrases" in the body of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the word combinations" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the distribution" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 14 and 15 recite the limitation "the position" in the body of the claim. There is insufficient antecedent basis for this limitation in the claims.

Claim 15 recites the limitation "the first" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the other text segments" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the bounds" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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Claims 31-32 recite the limitation " subsidiary items". The examiner does not know what is meant by the term. Neither the claims nor the specification provide clear indication what these items are. Clarification is requested.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4 and 7-13 and 72 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawatani (US 2003/0028558 A1).

As per claim 1 Kawatani is directed to apparatus for identifying topics of document data, the apparatus comprising:

a word ranker operable to rank words that are present in or representative of the content of the document data (paragraph 0020);

a co-occurrence ranker operable to rank co-occurrences of words that are present in or representative of the content of the document data (paragraph 0040);

a phrase ranker operable to rank phrases in the document data (paragraph 0050; paragraph 0051);

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a words selector operable to select the highest ranking words (paragraph 0045);

a co-occurrence identifier operable to identify which of the highest ranking co-occurrences contain at least one of the highest ranking words (paragraph 0043);

a phrase identifier operable to identify the phrases containing at least one word from the identified co-occurrences (paragraph 0052);

a phrase selector operable to select the highest ranking one or ones of the identified phrases as the topic or topics of the document data (paragraph 0055); and

an outputter operable to output data relating to the selected topics (paragraph 0055).

As per claim 2 Kawatani is directed to wherein the words selector is arranged to select as the highest ranking words a predetermined number of the highest ranking words, a number of the highest ranking words that represents a predetermined percentage of the words in the document data, or a number of the highest ranking words that represents a predetermined percentage of the number of ranked words (paragraph 0045).

As per claim 3 Kawatani is directed to wherein the co-occurrence identifier is arranged to select as the highest ranking co-occurrences a predetermined number of co-occurrences, a number of the highest ranking co-occurrences that represents a predetermined percentage of the co-occurrences in the document data, or a number of

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the highest ranking co-occurrences that represents a predetermined percentage of the number of ranked co-occurrences (paragraph 0043).

As per claim 4 Kawatani is directed to wherein the phrase selector is arranged to select as the highest ranking identified phrases a predetermined number of the identified phrases, a number of the highest ranking identified phrases that represents a predetermined percentage of the identified phrases in the document data, or a number of the highest ranking identified phrases that represents a predetermined percentage of the number of ranked phrases (paragraph (0055)).

As per claim 7 Kawatani is directed to comprising a co-occurrence determiner operable to determine word co-occurrences in the document data by identifying as co-occurrences word combinations comprising words in particular grammatical categories (paragraph 0034, lines 8-12).

As per claim 8 Kawatani is directed to comprising a co-occurrence determiner operable to determine word co-occurrences in the document data by identifying as co-occurrences at least some of the following combinations: noun and verb; noun and noun; noun and proper noun; verb and proper noun; and proper noun and proper noun (paragraph 0034, lines 8-12).

As per claim 9 Kawatani is directed to wherein the co-occurrence determiner is arranged to ignore the order of the words in the word combinations (paragraph 0034, lines 8-12, wherein the co-occurrence is independent of grammatical categories).

As per claim 10 Kawatani is directed to wherein the co-occurrence ranker is arranged to rank significant co-occurrences and the apparatus further comprises a co-occurrence determiner operable to determine word co-occurrences in the document data by identifying as co-occurrences word combinations comprising words in particular grammatical categories and a significance calculator operable to calculate a significance measure for the identified co-occurrences (paragraph 0034, lines 10-12, wherein "kinds" could mean "grammatical categories").

As per claim 11 Kawatani is directed to wherein the co-occurrence ranker is arranged to rank significant co-occurrences and the apparatus further comprises a co-occurrence determiner operable to determine word co-occurrences in the document data by identifying as co-occurrences at least some of the following combinations: noun and verb; noun and noun; noun and proper noun; verb and proper noun; and proper noun and proper noun, and a significance calculator operable to calculate a significance measure for the identified co-occurrences.

As per claim 12 Kawatani is directed to comprising: a text splitter operable to split the document data into text segments; and a classifier operable to classify the selected

topics according to the distribution in the text segments so as to define main and subsidiary topics in the document data, wherein the outputter is arranged to output data relating to the classified topics (paragraph 0033, lines 10-15).

As per claim 13 Kawatani is directed to wherein the classifier is arranged to determine that a topic is a main topic if the topic occurs in a predetermined percentage of the text segments and to classify any topic not meeting this requirement as a subsidiary or lesser topic (paragraph 0055, page 5, lines 3-7).

As per claim 72 Kawatani is directed to apparatus for identifying topics of document data, the apparatus comprising:

word ranking means for ranking words that are present in or representative of the content of the document data (paragraph 0020);

co-occurrence ranking means for ranking co-occurrences of words that are present in or representative of the content of the document data (paragraph 0040);

phrase ranking means for ranking phrases in the document data (paragraph 0050; paragraph 0051);

words selecting means for selecting the highest ranking words (paragraph 0045);

co-occurrence identifying means for identifying which of the highest ranking co-occurrences contain at least one of the highest ranking words (paragraph 0043);

phrase identifying means for identifying the phrases containing at least one word from the identified co-occurrences (paragraph 0052);

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phrase selecting means for selecting the highest ranking one or ones of the identified phrases as the topic or topics of the document data (paragraph 0055); and output means for outputting data relating to the selected topics (paragraph 0055).

10. Claim 64 is rejected under 35 U.S.C. 102(e) as being anticipated by Woods (US 5,594,658 B2).

As per claim 64 Woods is directed to a method of searching document data, the method comprising a processor carrying out the steps of:

receiving query terms supplied by a user (column 10, lines 46-46);
identifying, for each query term, co-occurrences of words present in or representative of the content of the document data that include the query terms (column 10, lines 47-53); and

outputting parts or portions of the document data containing the identified co-occurrences (column 11, lines 42-43).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawatani (US 2003/0028558 A1) in view of Fernley et al. (US 2002/0174101 A1).

As per claim 6 Kawatani does not teach at least one of the word ranker, co-occurrence ranker, and phrase ranker is arranged to weight the items to be ranked in accordance with their position in the document data.

Fernley et al. teaches at least one of the word ranker, co-occurrence ranker, and phrase ranker is arranged to weight the items to be ranked in accordance with their position in the document data (Fernley et al., paragraph 0075).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings to that of Fernley et al. to include at least one of the word ranker, co-occurrence ranker, and phrase ranker is arranged to weight the items to be ranked in accordance with their position in the document data because terms may have greater meaning depending on where they are in the document.

As per claim 14 Kawatani does not teach the classifier is arranged to weight a topic in accordance with the position in the document data of the text segment containing the topic.

Fernley et al. teaches the classifier is arranged to weight a topic in accordance with the position in the document data of the text segment containing the topic. (Fernley et al., paragraph 0075).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings to that of Fernley et al. to include at least one of the word ranker, co-occurrence ranker, and phrase ranker is arranged to weight the items to be ranked in accordance with their position in the document data because terms may have greater meaning depending on where they are in the document.

As per claim 15 Kawatani does not teach the classifier is arranged to weight a topic in accordance with the position in the document data of the text segments containing the topic so that a topic occurring in at least one of the first and last text segment of document data representing a document is given a higher weighting than topics occurring in the other text segments.

Fernley et al. teaches the classifier is arranged to weight a topic in accordance with the position in the document data of the text segments containing the topic so that a topic occurring in at least one of the first and last text segment of document data representing a document is given a higher weighting than topics occurring in the other text segments. (Fernley et al., paragraph 0075).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings to that of Fernley et al. to include at least one of the word ranker, co-occurrence ranker, and phrase ranker is arranged to weight the items to be ranked in accordance with their position in the

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document data because terms may have greater meaning depending on where they are in the document.

13. Claims 18-21, 23-25, 27-28, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawatani (US 2003/0028558 A1) in view of Katariya et al. (US 6,789,230 B2).

As per claim 18 Kawatani does not teach comprising a summary provider operable to provide summary data on the basis of the selected topics, wherein the outputter is arranged to output the summary data.

Katariya et al. teaches comprising a summary provider operable to provide summary data on the basis of the selected topics, wherein the outputter is arranged to output the summary data (Katariya et al., column 8, lines 7-9, wherein the outputter saves the summary).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings to that of Katariya et al. to include summary provider operable to provide summary data on the basis of the selected topics, wherein the outputter is arranged to output the summary data because summary is helpful in aiding readers in their review of documents.

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As per claim 19 Kawatani as modified is directed to the summary provider comprises a sentence selector operable to select sentences for use in the summary data (Katariya et al., column 4, lines 31-32).

As per claim 20 Kawatani as modified is directed to the sentence selector comprises:

a topic weight assigner operable to assign weights to the topics (Kawatani, paragraph 0065);

a sentence weight assigner operable to assign weights to sentences in the document data (Kawatani, paragraph 0065);

a scorer operable to score the sentences by summing the assigned topic and sentence weights (Katariya et al., column 4, lines 31-32); and

a selector operable to select the sentence or sentences having the highest score or scores for the summary (Katariya et al., column 4, lines 31-32).

As per claim 21 Kawatani as modified is directed to wherein the sentence selector comprises:

a topic weight assigner operable to assign weights to the topics (Kawatani, paragraph 0065);

a sentence weight assigner operable to assign weights to sentences in the document data (Kawatani, paragraph 0065);

a scorer operable to score the sentences by summing the assigned topic and sentence weights (Katariya et al., column 4, lines 31-32);

a selector operable to select the sentence or sentences having the highest score or scores (Katariya et al., column 4, lines 31-32);

a topic weight adjuster operable to relatively reduce the weight allocated to the topic or topics in the selected sentence or sentences (Katariya et al., column 6, lines 4-38); and

a controller operable to cause the scorer, selector and topic weight adjuster to repeat the above operations until a predetermined number of sentences has been selected for the summary from the document data (Katariya et al., column 6, lines 31-38).

As per claim 23 Kawatani as modified is directed to comprising:

a chunk identifier operable to identify in sentences selected for a summary chunks that do not contain words in the selected topics (Katariya et al., column 6, lines 31-38); and

a chunk modifier operable to modify the identified chunks wherein the chunk modifier is arranged to modify chunks by replacing them by ellipsis (Katariya et al., column 8, lines 9-11)

As per claim 24 Kawatani as modified is directed to wherein the chunk modifier is arranged to modify chunks by replacing them by ellipsis (Katariya et al., column 8, lines 9-11).

As per claim 25 Kawatani as modified is directed to wherein the chunk modifier is arranged to modify chunks by causing them to be displayed so as to place less emphasis on the modified chunks (Katariya et al., column 8, lines 9-15).

As per claim 27 Kawatani as modified is directed to wherein the chunk modifier is arranged to remove the identified chunks (Katariya et al., column 8, lines 9-11; wherein removed could mean not selected).

As per claim 28 Kawatani as modified is directed to comprising a processor operable to carry out syntactic or semantic processing on sentences from which chunks have been removed to maintain sentence coherence or cohesion (Kawatani, paragraph 0050, lines 1-3).

As per claim 29 Kawatani as modified is directed to wherein the chunk identifier is arranged to identify chunks by using punctuation marks to define the bounds of the chunks (Kawatani, paragraph 0033, lines 10-13).

As per claim 33 Kawatani does not teach comprising a concept identifier operable to identify from the document data concepts that determine words representative of the content of the document data.

Katariya et al. teaches comprising a concept identifier operable to identify from the document data concepts that determine words representative of the content of the document data (Katariya et al., column 6, lines 31-37, wherein the summary could mean concept).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings as modified to that of Katariya et al. to comprising a concept identifier operable to identify from the document data concepts that determine words representative of the content of the document data because concept/summary is helpful in aiding readers in their review of documents.

14. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawatani (US 2003/0028558 A1) in view of Katariya et al. (US 6,789,230 B2) and further in view of Woods (US 6,594,658 B2).

As per claim 30 Kawatani as modified does not teach the summary provider comprises a locator operable to locate words present in or representative of the content of the document data that co-occur with words in the topics; and the outputter is

arranged to output summary data in which the or each topic is associated with subsidiary items comprising located co-occurring words.

Woods teaches the summary provider comprises a locator operable to locate words present in or representative of the content of the document data that co-occur with words in the topics; and the outputter is arranged to output summary data in which the or each topic is associated with subsidiary items comprising located co-occurring words (Woods, column 10, lines 47-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings as modified to that of Woods to include the summary provider comprises a locator operable to locate words present in or representative of the content of the document data that co-occur with words in the topics; and the outputter is arranged to output summary data in which the or each topic is associated with subsidiary items comprising located co-occurring words because locating important words within document is helpful in aiding readers in their review of documents.

As per claim 31 Kawatani as modified is directed to the summary provider further comprises a further locator operable to locate all words present in or representative of the content of the document data that co-occur with the subsidiary items and the outputter is arranged to associate each such co-occurring word with the corresponding subsidiary item in the summary data (Woods, column 10, lines 47-53).

As per claim 32 Kawatani is directed to the summary provider further comprises a filter operable to filter the co-occurring words to select for the summary data those co-occurring words that themselves have co-occurrences with the subsidiary items (no citation due to 112 2nd rejection).

15. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawatani (US 2003/0028558 A1) in view Katariya et al. (US 6,789,230 B2) and further in view of Grefenstette et al. (US 2003/0069877 A1).

As per claim 34 Kawatani as modified does not teach the concept identifier is arranged to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data.

Grefenstette et al. teaches the concept identifier is arranged to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data (Grefenstette et al., paragraph 0303, lines 7-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings as modified to that of Grefenstette et al. to the concept identifier is arranged to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data because synonyms give broader interpretation of given term.

As per claim 35 Kawatani as modified does not teach the concept identifier is arranged to access a lexical database to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data

Grefenstette et al. teaches teach the concept identifier is arranged to access a lexical database to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data (Grefenstette et al., paragraph 0157).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Kawatani teachings as modified to that of Grefenstette et al. to the concept identifier is arranged to identify as concepts at least one of synonyms, hypernyms and hyponyms in or relating to the document data because synonyms give broader interpretation of given term.

Allowable Subject Matter

16. Claims 5,16-17, 22 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

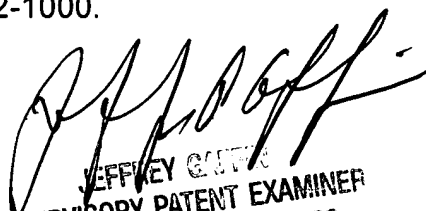
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571)272-1721. The examiner can normally be reached on 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tomasz Ponikiewski
November 28, 2006


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100